IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A video image object recognizing apparatus for determining a candidate for an object which may possibly be present in a captured video image and a range of a captured video image to search for the candidate for the object, from positional information which is information of a position of an object and image capturing information including information for determining an area where an image will be captured, and recognizing whether the object of said candidate is present in said captured video image in said range or not, using visual feature information which is visual feature information of said candidate for the object.

2. (Previously Presented) A video image object recognizing apparatus according to claim 1, wherein said range is determined using at least one of the position, a size, and an image capturing position of said candidate for the object in said captured video image, and a distance between the positions of said objects.

3. (Previously Presented) A video image object recognizing apparatus for estimating a position of an object in a captured video image from positional information which is information of the position of an object and image capturing information including information for determining an area where an image will be captured, and recognizing whether said object is present or not using a difference between visual feature quantities of a partial video image of said captured video image and said object and a difference between the position of said partial video image and said estimated position.

4. (Previously Presented) A video image object recognizing apparatus

-2-

according to claim 3, wherein a probability distribution of an error of said image capturing information is reflected in a probability distribution that an object is present in recognizing whether said object is present or not.

5.   (Previously Presented) A video image object recognizing apparatus according to claim 4, wherein the probability distribution that an object is present is employed as the difference between the position of said partial video image and said estimated position.

6.   (Previously Presented) A video image object recognizing apparatus according to claim 5, wherein a normal distribution of a variance of an error of said image capturing information is employed as said probability distribution.

7-29 (cancelled)

30.   (New) A method of recognizing a video image object, comprising the steps of:

determining a candidate for an object which may possibly be present in a captured video image and a range of a captured video image to search for the candidate for the object, from positional information which is information of a position of an object and image capturing information including information for determining an area where an image will be captured; and

recognizing whether the object of said candidate is present in said captured video image in said range or not, using visual feature information which is visual feature information of said candidate for the object.

31.   (New) A method of recognizing a video image object according to claim 30, wherein said range is determined using at least one of the position, a size, and an image

capturing position of said candidate for the object in said captured video image, and a distance between the positions of said objects.

32.   (New) A method of recognizing a video image object, comprising the steps of:

estimating a position of an object in a captured video image from positional information which is information of the position of an object and image capturing information including information for determining an area where an image will be captured; and

recognizing whether said object is present or not using a difference between visual feature quantities of a partial video image of said captured video image and said object and a difference between the position of said partial video image and said estimated position.

33.   (New) A method of recognizing a video image object according to claim 32, wherein a probability distribution of an error of said image capturing information is reflected in a probability distribution that an object is present in recognizing whether said object is present or not.

34.   (New) A method of recognizing a video image object according to claim 33, wherein the probability distribution that an object is present is employed as the difference between the position of said partial video image and said estimated position.

35.   (New) A method of recognizing a video image object according to claim 34, wherein a normal distribution of a variance of an error of said image capturing information is employed as said probability distribution.

36.   (New) A computer readable recording medium storing a video image

object recognizing program adapted to be installed in a video image object recognizing apparatus, said image object recognizing program to enable a computer to perform a process, comprising the steps of:

determining a candidate for an object which may possibly be present in a captured video image and a range of a captured video image to search for the candidate for the object, from positional information which is information of a position of an object and image capturing information including information for determining an area where an image will be captured; and

recognizing whether the object of said candidate is present in said captured video image in said range or not, using visual feature information which is visual feature information of said candidate for the object.

37.   (New) A computer readable recording medium according to claim 36, wherein said range is determined using at least one of the position, a size, and an image capturing position of said candidate for the object in said captured video image, and a distance between the positions of said objects.

38.   (New) A computer readable recording medium storing a video image object recognizing program adapted to be installed in a video image object recognizing apparatus, said image object recognizing program to enable a computer to perform a process, comprising the steps of:

estimating a position of an object in a captured video image from positional information which is information of the position of an object and image capturing information including information for determining an area where an image will be captured; and

recognizing whether said object is present or not using a difference between

visual feature quantities of a partial video image of said captured video image and said object and a difference between the position of said partial video image and said estimated position.

39.   (New) A computer readable recording medium according to claim 38, wherein a probability distribution of an error of said image capturing information is reflected in a probability distribution that an object is present in recognizing whether said object is present or not.

40.   (New) A computer readable recording medium according to claim 39, wherein the probability distribution that an object is present is employed as the difference between the position of said partial video image and said estimated position.

41.   (New) A computer readable recording medium according to claim 17, wherein a normal distribution of a variance of an error of said image capturing information is employed as said probability distribution.